

### **Remarks**

The Applicants have amended Claim 7 to include the subject matter of Claim 11. Claim 11 has accordingly been cancelled. Claim 12 has also been cancelled as being redundant based on the amendment to Claim 7. Claim 15 has been amended by incorporating the subject matter of Claim 9. Claim 13 has accordingly been cancelled. Claim 14 has also been cancelled in view of the cancellation of Claim 10.

Claims 9 and 10 stand objected to as being in improper dependent form. Claim 10 has been cancelled thereby rendering that rejection moot. Claim 9, on the other hand, has been amended into independent form, which includes some of the subject matter of Claim 7. Also, the subject matter of Claim 11 has been added to new independent Claim 9. Withdrawal of the objection is respectfully requested.

Claims 7-14 stand rejected under 35 USC §103 as being obvious over Asahi. The Applicants note with appreciation the Examiner's helpful comments hypothetically applying Asahi to those claims. The Applicants nonetheless respectfully submit that those claims are not obvious over Asahi. Reasons are set forth below.

First, the Applicants agree that Asahi "does not teach a specific example of a seamless tubular good using the steel composition." While it is true that Asahi mentions the possibility of a seamless pipe in paragraph [0144] in a passing manner, it is readily apparent to those skilled in the art that Asahi teaches away from the utilization of seamless pipes. This is seen by the teachings in Asahi found in paragraph [0118] of Asahi wherein Asahi states that although steel pipe may be produced "in principle" by seamless rolling, such seamless steel pipe having a large working at a temperature corresponding to the finishing rolling is not possible. The result is that

such as-rolled seamless steel pipe has defects and a low-yield strength. Resulting pipes have a low collapse pressure and a large unevenness in their thickness. This increases susceptibility to bending during expansion.

Thus, one skilled in the art would be led away from utilization of seamless steel pipes or articles based on the overall discussions in Asahi that teach that seamless steel pipes in this connection are to be avoided and that welded seam pipes are preferred. In fact, a large amount of discussion is applied throughout Asahi concerning welding such as in paragraphs [0141] and [0143], for example. On this basis alone, the Applicants respectfully submit that the subject matter of Claims 7-14 is anything but obvious over Asahi.

In any event, the Applicants respectfully submit that the rejected claims are not obvious over Asahi for other reasons. For example, the rejection frankly acknowledges that Asahi “does not teach what the amount of ferrite is.” However, the rejection takes the position that “the term “bainitic ferrite” at 100% of the microstructure reads on the range of ferrite as claimed.” The Applicants respectfully submit that this cannot be true inasmuch as Asahi refers to “bainitic ferrite” and ferrite as separate and different compositions. For example, referring to Table 2, there is a column under the label “Structure.” That column identifies various phases including bainitic ferrite as BF, bainite as B, martensite as M, perlite as P and ferrite as F. Therefore, it becomes clear that Asahi considers ferrite and bainitic ferrite to be separate and distinct phases. Thus, the fact that various structures identified in Table 2 contain bainitic ferrite and bainite means that they inherently do not contain about 5% to about 70% of ferrite and the balance substantially composed of a low temperature-transforming phase. Further, of the steels that are identified as containing ferrite, namely example numbers 13 and 14, they are directed to the comparative examples on the one hand and also do not provide the relative amount of ferrite

versus perlite in those examples. Thus, they are not enabling as potential prior art disclosures against the Applicants' claimed amount of ferrite at a volume fraction of about 5% to about 70% of the balance substantially composed of the low temperature-transforming phase.

The Applicants therefore respectfully submit that Asahi not only does not teach the amount of ferrite, but Asahi distinguishes ferrite from bainitic ferrite and that the existence of bainitic ferrite in no way renders the Applicants' claimed amount of ferrite obvious, much less "read" on the range of ferrite as claimed. As such, the Applicants respectfully submit that Asahi does not provide disclosure that renders the rejected claims *prima facie* obvious. Withdrawal of the rejection is respectfully requested.

Claims 15 and 16 stand rejected under 35 USC §103 over the hypothetical combination of Kondo with Asahi. The Applicants respectfully submit that Kondo fails to provide disclosure that would cure the deficiencies set forth above with respect to Asahi. Accordingly, even if one skilled in the art were to hypothetically make the combination, the combination would still not result in the subject matter of Claims 15 and 16.

However, there are additional reasons. The elements of the composition are disclosed only in Fig. 4 in Kondo. Particularly, the C contents are 0.24% and 0.28%, both of which exceed the maximum limit of Claim 15. Therefore, as set out in paragraph No. [0026] on page 10 of the Applicants' Specification, because pearlite is formed by Kondo, it would not be reasonably expected that the structure of a Kondo steel pipe would contain ferrite at a volume fraction of 5% to 70% and the balance substantially composed of a low temperature-transforming phase as recited in Claim 15.

There are additional differences over Claim 16 with respect to Asahi. The normalizing treatment (Steel No. B of Test No. 5, and Steel No. E of Test No. 11) of Example 1 disclosed in

Asahi, which was noted in the rejection, is not AC<sub>3</sub> for 60 seconds, but heating at 960°C for 60 seconds and then put to standing to cool. 960°C is a temperature which exceeds AC<sub>3</sub> 891°C and 852°C of Steel B and Steel E in Table 3. Consequently, Asahi does not teach the condition of the normalizing treatment which is performed in the region of from point A<sub>1</sub> to point A<sub>3</sub> for five minutes or more as recited in Claim 16. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



T. Daniel Christenbury  
Reg. No. 31,750  
Attorney for Applicants

TDC/vp  
(215) 656-3381